

REMARKS

Reconsideration of the subject application in view of the present amendment is respectfully requested.

By the present amendment, claims 1 and 4 have been amended.

Based on the foregoing amendments and the following remarks, the application is deemed to be in condition for allowance, and Action to that end is respectfully requested.

It is further respectfully submitted that claims 4-6 and 12-14 are in condition for all allowance. Claims 4-6 and 12-14 were indicated as being allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. Accordingly, claim 4, which has been so rewritten, and claims 5-6 and 12 now dependent on claim 4, directly or indirectly, are in condition for allowance.

It is respectfully submitted that claims 10-11, which depend on claim 6, directly and indirectly, respectively, are also allowable as being dependent on an allowable subject matter.

The Examiner rejected claims 1-3 and 7-11 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,019,072 (Phillips, et al). Claims 1-3, 7-11, 15 and 16 were also rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. patent No. 6,722,548 (Odoni, et al). It is respectfully submitted that claims 1-3, 7-9, 15 and 16 are allowable over the cited references.

Specifically, claim 1 recites at least one metering device for metering out a predetermined amount of fuel in each operational cycle in form of n-number of discrete, equal volume, separate portions, wherein $n > 1$. No such metering device is disclosed in Phillips et al. and Odoni et al.

The fuel delivering concept disclosed by Phillips (US 6,019,072) differs strongly from that claimed by present claim 1. In the tool (10) disclosed by Phillips a gaseous fuel first flows from a fuel container (77) into a pressure regulator (82) and then through a fuel inlet tube (64) to a shuttle valve (61). Regulator (82) reduces the pressure of gaseous fuel to a preferred pressure that is “constant” within about 1 psi (see col. 5, lines 9-19). As the pressure is only “constant” within a range of 1 psi, the measured volume can never be really constant. The shuttle valve (61) consists of a metering chamber (134); a gating valve (138) and a combustion check valve (138) (see col. 5, lines 20-26). Metering

chamber (134) and gating valve (138) are arranged and configured to provide asynchronous fluid communication between metering chamber (134) and combustion chamber (126) or between metering chamber (134) and regulator (82).

Combustion check valve (136) is arranged and configured for preventing fluid flow from combustion chamber (126) to metering chamber (134). An outlet (178) of the shuttle valve (61) is in contact with a fuel “metering” tube (70) which has two ports (190, 192) for dispensing fuel to the combustion chamber (126) (see col. 5, lines 64-67 and col. 6, line 63, to col. 7, line 8). The “metering” tube is never closed completely, hence no metering takes place at the tube (70) (see especially Fig. 17 in combination with col. 7, lines 21-25, and col. 5 lines 64-67). Only a splitting of a fuel stream takes place at the ports (190, 192) (see col. 7, lines 4-8). Pushing or compressing the tool against a workpiece actuates shuttle valve (61), dispenses fuel through fuel metering tube (70), and creates turbulence or swirling of fuel and air in combustion chamber (126) (see col. 9, lines 36-40). Fuel thereby is dispensed in a single flush or in other word in one portion. Instead of a control device for the generation of a plurality of fuel portions, a linear cam 206 is utilized to actuate the shuttle valve for a single time when the tool is pressed on a workpiece (see col. 8, lines 24-28 and col. 9, lines 36-40).

In view of the above, it is respectfully submitted that Phillips et al. does not anticipate or makes obvious the present invention, as defined by claim 1.

Odoni likewise does not anticipate or make obvious the present invention as defined by claim 1.

In the setting tool disclosed by Odoni (US 6,722,548) the fuel is led from a fuel reservoir (11) to the combustion chamber via an electronically controlled valve (24), a flow meter (21) and a mechanically controlled valve (18) arranged one after the other in a feeding conduit (12). Upon pressing the setting tool on a surface the mechanically controlled valve (14) opens and fuel can flow through the conduit (12) via the normally open electronically controlled valve (24), the flow meter (21) and the mechanically controlled valve (14) into the combustion chamber (13) (see col. 4, lines 21-34). After a certain time, the electronically controlled valve (24) gets closed by an electronic signal from the control circuit (20) (see col. 4, lines 35-46). The fuel thus is brought into the combustion chamber all at once in a single portion and not in a number of n discrete portions.

In view of the above, it is respectfully submitted that claim 1 is patentable over both Phillips and Odoni and is allowable.

Claims 2-3, 7-9, 15 and 16 depend on claim 1 and are allowable as being dependent on an allowable subject matter.

CONCLUSION

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance, and allowance of the application is respectfully requested.

Should the Examiner require or consider it advisable that the specification, claims and/or drawings be further amended or corrected in formal respects, in order to place the case in condition for final allowance, then it is respectfully requested that such amendment or correction to be carried out by Examiner's amendment and the case passed to issue. Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

Alexander Zinchuk

Alexander Zinchuk
Reg. No. 30,541

Date: March 24, 2006
Abelman, Frayne & Schwab
666 Third Avenue, 10th Floor
New York, NY 10017-5621
212-885-9383

This correspondence is being deposited with the United States Postal Service on March 24, 2006 in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number ER 059 675 630 US addressed to the Honorable Commissioner for Patents, Alexandria, VA 22313-1450.

Alexander Zinchuk
Alexander Zinchuk